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Air Permit

AIR PA 049

AIR PA #:	DB0378S	007711A
File Type:	Permits	
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AIRPA/DB03785/77114/PA



GAF ELK MATERIALS CORPORATION

2600 Singleton Boulevard, Dallas, TX 75212

Tel: 214-637-1060

October 22, 2008

AIR PERMITS DIVISION

OCT 2 4 2008

Jakyai DECENT

Mr. Mark R. Vickery, Executive Director Texas Commission on Environmental Quality Attention: Air Permits Initial Review Team (APIRT) Mail Code 161, 12100 Park 35 Circle Building C, Third Floor Austin, Texas 78753

Re: TCEQ Permit No.7711A Alteration Notification Building Materials Corporation of America. – Dallas Plant – Dallas County TCEO Account No. DB-0378-S, CN 602717464, RN 100788959

To Whom It May Concern:

Building Materials Corporation of America doing business as GAF Materials Corporation (GAF) owns and operates an existing asphalt roofing production facility in Dallas, Texas (Dallas Plant). The Texas Commission on Environmental Quality (TCEQ) Account No. for the Dallas Plant is DB-0378-S. GAF operates under TCEQ Customer Reference Number (CN) 602717464, and the Dallas Plant operates under TCEQ Regulated Entity Reference Number (RN) 100788959.

The Dallas Plant has been issued TCEQ Permit No. 7711A (air quality construction permit). Pursuant to 30 TAC 116.116(c)(3) this letter serves as notification of a permit alteration to Permit No. 7711A to reduce volatile organic compound (VOC) emissions limits for the Line 1 Cooling Section (EPN: COOL1) and the Line 3 Cooling Section (EPN: COOL3) based on stack testing results.

Background

The GAF Dallas Plant conducted stack testing for COOL3 and COOL1 on July 26, 2005 and April 24, 2008, respectively. The stack test results are presented in Table 1 below:

Table 1: Stack Test Results for VOC Emissions from EPNs COOL3 and COOL1

Line 3	Cooling Secti	on (EPN: C	OOL3)	Line 1	Cooling Section	n (EPN: CC	OOL1)
Stack	Hourly	Hourly Emission Rate (lb/hr)			ck Hourly Emission Rate (lb/h		te (lb/hr)
	Run 1	Run 2	Run 3		Run 1	Run 2_	Run 3
Stack 1	0.88	1.01	0.81	Stack 1	0.15	0.48	0.14
Stack 2	0.40	0.42	0.37	Stack 2	0.20	0.22	0.99
Stack 3	0.65	0.54	0.47	Stack 3	0.06	0.08	0.05
TOTAL	1.93	1.97	1.65	TOTAL	0.41	0.78	1.18

Current maximum allowable VOC emission rates, per TCEQ Permit No. 7711A, for EPNs COOL3 and COOL1 are shown in Table 2.

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Table 2: Maximum Allowable Emission Rates per Permit No. 7711A

Current Maximum Allowable Emission Rate					
	Hourly Emission Limit	Annual Emission Limit			
EPN	(lb/hr)	(tpy)			
COOL3	3.38	14.80			
COOL1	2.22	9.73			

Pursuant to TCEQ rules, GAF is revising COOL3 and COOL1 permitted maximum allowable emission rates for VOC based on these stack test results for COOL3 and COOL1. The new permit limits are established based on the maximum 1-hour stack test result for each line plus a 40% safety factor as shown in Table 3:

Table 3: Proposed Emission Rates for COOL3 and COOL1

	Total Maximum Hourly Emission Rate from Stack Testing	Revised Hourly Emission Rate ¹	Revised Annual Emission Rate ²
EPN	(lb/hr)	(lb/hr)	(tpy)
COOL3	1.97	2.76	12.09
COOLI	1.18	1.65	7.23

Permit Alteration Requirements

The requirements for a permit alteration are addressed below. The permit alteration requirements found in Title 30 of the Texas Administrative Code Section 116.116(c) [30 TAC 116.116(c)] are included in italics.

116.116(c)(1) A permit alteration is:

(A) a decrease in allowable emissions; or

(B) any change from a representation in an application, general condition, or special condition in a permit that does not cause:

- (i) a change in the method of control of emissions;
- (ii) a change in the character of emissions; or
- (iii) an increase in the emission rate of any air contaminant.

The change in emission rates of EPNs COOL3 and COOL1 represents a decrease in allowable emissions of VOC. The change will not require a change to the general or special conditions of TCEQ Permit No. 7711A. The character of emissions will remain the same (i.e., no new air contaminants will be emitted).

116.116(c)(2) Requests for permit alterations that must receive prior approval by the executive director are those that:

- (A) result in an increase in off-property concentrations of air contaminants;
- (B) involve a change in permit conditions; or
- (C) affect facility or control equipment performance.

The reduction in allowable emissions does not result in an increase in off-property concentrations of air contaminants nor will it involve a change in TCEQ Permit No. 7711A conditions. In addition, the reduction in emission rates will not affect any facility performance.

¹ Revised Hourly Emission Rate is the maximum hourly emission rate achieved during a 1-hour run for each cooling line plus a 40% safety factor.

² Revised Annual Emission Rate is the Revised Hourly Emission Rate for 8760 hours of operation per year.

116.116(c)(3) The executive director shall be notified in writing of all other permit alterations not specified in paragraph (2) of this subsection.

This letter serves as written notification of the permit alteration to TCEQ Permit No. 7711A.

116.116(c)(4) A request for permit alteration shall include information sufficient to demonstrate that the change does not interfere with the owner or operator's previous demonstrations of compliance with the requirements of $\S116.111(a)(2)(C)$ of this title.

The reduction in emission rates will not interfere with previous demonstrations of compliance with the requirements of 30 TAC 116.111(a)(2)(C) – Best Available Control Technology.

116.116(c)(5) Permit alterations are not subject to the requirements of $\S116.111(a)(2)(C)$ of this title.

GAF understands that permit alterations are not subject to the requirements of 30 TAC 116.111(a)(2)(C) – Best Available Control Technology of this title.

If you have any questions, please call me at (214) 637-8909.

Sincerely,

Doug Harris
Plant Engineer

cc:

Mr. Tony Walker, TCEQ Regional Office 4

Mr. David Miller, City of Dallas, Air Pollution Control Program

Mr. Fred Bright, GAF Mr. David Fuelleman, GAF

SPECIAL CONDITIONS

Permit Number 7711A

EMISSION STANDARDS AND FUEL SPECIFICATIONS

- 1. Total emissions from these sources shall not exceed the values stated on the enclosed table entitled "Emission Sources Maximum Allowable Emission Rates." The permitted emission limits for all emission point numbers (EPNs) are based on 8,760 annual hours of operation.
- 2. The fuel for this facility shall be pipeline sweet natural gas as defined in Title 30 Texas Administrative Code Chapter 101 (30 TAC Chapter 101). Use of any other fuel shall require prior written approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ).

FEDERAL APPLICABILITY

3. The holder of this permit shall comply with all requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated for Asphalt Processing and Asphalt Roofing Manufacture in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subparts A and UU.

OPACITY/VISIBLE EMISSION LIMITATIONS

- 4. Opacity of emissions from the Electrostatic Precipitator (EPN 34), all dust collector stacks, all process heater vents, and building vents shall not exceed 5 percent averaged over a six-minute period as determined by the EPA Test Method (TM) 9 or equivalent. There shall be no discharge into the atmosphere from any asphalt storage tank exhaust gases with opacity greater than 0 percent except for one consecutive period in any 24-hour period when the transfer lines are being blown for clearing.
- 5. No visible emissions from this facility operation, road, or travel area shall leave the property. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined using EPA TM 22 or equivalent.

OPERATIONAL LIMITATIONS AND WORK PRACTICES

- 6. The company has represented the following to comply with all TCEQ rules and regulations:
 - A. All filler and backing material shall be received and transferred with no visible emissions leaving the building.

- B. The emissions from blowing stills and in the following Stillyard Storage Tank Nos. T-8, T-9, T-10, T-14, T-15, T-110, and T-120 containing asphalt shall be vented to the thermal oxidizer.
- C. The maximum allowable asphalt throughput rates are 24,886 pounds per hour (lbs/hr) for Line 1, and 41,472 lbs/hr for Line 3.
- D. The maximum allowable production rate for both Lines 1 and 3 is 171 tons per hour (1,498,000 tons per year) of finished shingles.
- 7. An opacity violation or an odor nuisance condition, as confirmed by the TCEQ or any local air pollution control program with jurisdiction, may be cause for additional controls. If the nuisance condition persists, subsequent stack sampling may also be required.
- 8. All in-plant roads and areas subject to road vehicle traffic shall be paved with a cohesive hard surface and cleaned, as necessary, to maintain compliance with the TCEQ rules and regulations Unpaved work areas shall be sprayed with water and/or environmentally sensitive chemicals upon detection of visible particulate matter (PM) emissions to maintain compliance with all TCEQ rules and regulations.

INITIAL DETERMINATION OF COMPLIANCE

9. Within 180 days after the issuance date of this permit, stack sampling of the Electrostatic Precipitator (EPN 34) and the Boiler/Thermal Oxidizer Vent (EPN 8) for PM, nitrogen oxides (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), and volatile organic compounds (VOC) emissions shall occur to demonstrate compliance with the allowable emissions set forth in this permit. Also within 180 days after the issuance of this permit, stack sampling of the emissions from Line 1 cooling section (EPN COOL1) and Line 3 cooling section (COOL3) shall occur to demonstrate compliance with the allowable emissions set forth in this permit. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with any applicable requirements of 40 CFR Part 60 requires EPA approval, and requests shall be submitted to the TCEQ Austin Compliance Support Division.

CONTINUOUS DETERMINATION OF COMPLIANCE

10. Upon being informed by the TCEQ Executive Director that the staff has documented visible emissions from EPNs listed in Special Condition No. 4 that exceed the opacity specified in Special Condition No. 4, the holder of this permit shall conduct stack sampling analyses or other

SPECIAL CONDITIONS Permit Number 7711A Page 3

tests to prove satisfactory abatement or process equipment performance and demonstrate compliance with the PM and VOC allowables specified in the maximum allowable emission rates table. Sampling must be conducted in accordance with appropriate procedures of the TCEQ <u>Sampling Procedures Manual</u> or in accordance with applicable EPA Code of Federal Regulations procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director prior to sampling.

SAMPLING REQUIREMENTS

- 11. Sampling ports and platform(s) shall be installed on the exhaust stack according to the specifications set forth in the TCEQ <u>Sampling Procedures Manual</u>, "Chapter 2, Stack Sampling Facilities" prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the TCEQ Executive Director.
- 12. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their expense.
- 13. The plant shall operate at the maximum shingle production and raw material throughput rates and operating parameters, represented in the confidential file, during stack emissions testing being conducted for initial and/or continuing compliance demonstrations. If the plant is unable to operate at the maximum rates during initial compliance testing, then the production/throughput rates or other parameter may be limited to the rates established during testing. If stack testing was not accomplished at the maximum production/throughput rates, then such testing may be required prior to actual operations at the maximum rates.
- 14. A pretest meeting concerning the required sampling and/or monitoring shall be held with personnel from TCEQ before the required tests are performed. Air contaminants to be tested for and test methods to be used shall be confirmed at this pretest meeting.
 - A. During a continuous compliance determination with Special Condition No. 10 stipulations, sampling shall occur within 60 days of the written notification of violation from the TCEQ.
 - B. The TCEQ Regional Office shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. The notice to the TCEQ Regional Office shall include:
 - (1) Date for pretest meeting.
 - (2) Date sampling will occur.
 - (3) Name of firm conducting sampling.
 - (4) Type of sampling equipment to be used.
 - (5) Method or procedure to be used in sampling.

SPECIAL CONDITIONS Permit Number 7711A Page 4

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test results.

- C. Air contaminants to be tested for include (but are not limited to) PM, CO, SO₂, NO_x, and VOC.
- D. Copies of the final sampling report shall be submitted within 30 days after sampling is completed. Sampling reports shall comply with the provisions of Chapter 14 of the TCEQ <u>Sampling Procedures Manual</u>. The reports shall be distributed as follows:

One copy to the TCEQ Dallas/Fort Worth Regional Office. One copy to the TCEQ Austin Compliance Support Division.

- 15. A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Office shall approve or disapprove of any deviation from specified sampling procedures.
- 16. Requests to waive testing for any pollutant specified in the above special conditions shall be submitted to the TCEQ Office of Permitting, Remediation, and Registration, Air Permits Division.

RECORDKEEPING REQUIREMENTS

17. Records shall be kept as specified in General Condition No. 7 and made available upon request to the TCEQ or any air pollution control program having jurisdiction.

Dated <u>October 21, 2004</u>

Permit Number 7711A

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
STILLYARD OF	PERATION			
HTR3	T-1 Laminating Adhesive Bulk	NO_x	0.05	0.22
	Storage Tank Heater Vent	SO_2	0.01	0.01
	- .	PM_{10}	0.01	0.02
	,	CO	0.04	0.18
		VOC	0.01	0.01
CECO1	T-1 and T-2 Laminating Adhesive	VOC	0.03	0.17
	Tanks CECO Filter Vent	PM ₁₀	0.01	0.02
HTR4	T-2 Laminating Adhesive Bulk	NO _x	0.05	0.22
C	Storage Tank Heater Vent	SO_2	0.01	0.01
		PM_{10}	0.01	0.02
		CO	0.04	0.18
		VOC	0.01	0.01
HTR 5	Asphalt Heater for T-14 and T-15	NO_x	0.10	0.43
	Coating Asphalt Storage Tank and	SO_2	0.01	0.01
	Coating Asphalt Loop Feed Tank	PM_{10}	0.01	0.03
		CO	0.08	0.36
		VOC	0.01	0.02
BLR5	Standby Boiler Vent	NO_x	3.73	16.34
	. •	$\hat{SO_2}$	0.02	0.09
		PM_{10}	0.28	1.23
		CO	3.13	13.71
		VOC	0.21	0.92

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
8	Boiler and Thermal Oxidizer Vent	NO_x	0.72	3.16
	Controlling Tanks T-8, T-9, T-10,	$\hat{SO_2}$	0.73	3.18
	T-14, T-15, T-110, T-120, and	PM_{10}^{2}	5.00	21.90
	Blowstills T-13 and T-26	CO	1.26	5.53
		VOC	0.09	0.37
COMMON TO LINI	E 1 AND LINE 3			
34	Electrostatic Precipitator (for	VOC	5.76	25.23
	Line 1 and 3) Stack	PM_{10}	3.43	15.02
98	Rail 2 Stack	PM_{10}	4.63	4.59
		VOC	0.51	0.51
LINE NO. 1 OPERA	TION			
1-1	Line 1 Stabilizer Storage and Heater Baghouse Stack	PM_{10}	0.23	1.01
1-3	Line 1 Stabilizer Use Bin Baghouse Stack	PM_{10}	0.03	0.13
1-4	Line 1 (Surfacing Section) Dust Collector Stack No. 1	PM_{10}	0.59	2.58
1-5	Line 1 (Surfacing Section) Dust Collector Stack No. 2	PM_{10}	0.59	2.58
1-6	Line 1 (Surfacing Section) Dust Collector Stack No. 3	PM_{10}	0.59	2.58
HTR1	Line 1 Stabilizer Thermal Fluid	NO_x	0.20	0.86
	Heater Vent	SO_2	0.01	0.01
		PM_{10}	0.02	0.07
		CO	0.17	0.72
	•	VOC	0.01	0.05
	·			

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
I I TO O	**	310	0.00	0.04
HTR2	Line 1 Thermal Fluid Heater Vent	NO _x	0.20	0.86
		SO ₂	0.01	0.01
		PM_{10}	0.02	0.07
		CO	0.17	0.72
		VOC	0.01	0.05
COOL1(total 3 stks)	Line No. 1 Cooling Section	VOC	2.22	9.73
,	Exhaust	PM_{10}	4.00	17.52
LINE 3 OPERATIO	N			
25	Sand Application Baghouse Stack	PM_{10}	3.86	16.91
		-		
26A	Stabilizer Storage Baghouse Stack	PM_{10}	0.15	0.70
26B	Stabilizer Storage Baghouse Stack	PM_{10}	0.29	1.26
27	Stabilizer Heater Baghouse Stack	PM_{10}	0.09	0.40
28	Asphalt Heater Vent	NO_x	0.59	2.60
	•	SO_2^{λ}	< 0.01	0.02
		PM_{10}	0.04	0.20
		CO	0.50	2.20
		VOC	0.03	0.10
20	Had Oil Handar W. et	NO	0.27	1.00
30	Hot Oil Heater Vent	NO _x	0.27	1.20
	(Thermal Fluid Heater)	SO ₂	<0.01	0.01
		PM_{10}	0.02	0.10
•		CO	0.23	1.00
		VOC	0.01	0.04
FUG1	Plantwide Fugitive Emissions (4)	VOC ·	0.43	1.88
		PM_{10}	0.91	3.97
COOL3 (total 3 stks)	Line 3 Cooling Section (3 Exhaust)	VOC	3.38	14.80
COOLS (total S siks)	Fumes from Asphalt Coater	PM ₁₀	6.00	26.30
	i unico nom Asphan Coater	1 141 10	0.00	20.50

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
HTR6	Line 3 Stabilizer Thermal Fluid	NO_x	0.60	2.58
Heater Vent	Heater Vent	SO_2	< 0.01	0.02
	•	PM_{10}	0.05	0.20
		CO	0.49	2.16
		VOC	0.03	0.14

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) NO_x total oxides of nitrogen
 - SO₂ sulfur dioxide
 - PM₁₀ particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 - CO carbon monoxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Fugitive emissions are an estimate only.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:
 - 24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year
- ** Compliance with annual emission limits is based on a rolling 12-month period.

Maximum allowable Asphalt Throughput Rate: Line 1 at 24,886 lbs/hour Line 3 at 41,472 lbs/hour

Maximum Allowable Production Rate (Line 1 plus Line 3): 171 tons/hour of finished shingles 1,498,000 tons/year of finished shingles

Projects Listing

Air Permitting Actions for

Project Status: ALL Permit Status: ALL

Permit Number: 7711a

Order By: proj_id Sort Direction: desc

of 9 Records

Row Permit Permit Type Project Record Num	Project Type Company R	TCEQ Permit TechStaff Date Issue Date	Permit Project Status Status	Project Complete Tech Name Date	Near County Regulated Id Customer Id Renewal APIRT Ru City Date Staff	des Physical Permit Issued Loc To
1 7711A CONSTRUCT 143272 AI	BUILDING MATERIALS CORPORATION 12/3 OF AMERICA	19/2008 ,TLDRMC	ACTIVE PENDING	ASPHALT ROOFING PRODUCTION FACILITY	DALLAS DALLAS RN100788959 CN602717464 10/21/2014 TOYLER	2600 BUILDING MATERIALS CORPORATION Blvd OF AMERICA
2 7711A CONSTRUCT 141918 R	OF AMERICA	24/2008 ABERKSAN	ACTIVE PENDING	ASPHALT ROOFING FACILITY	DALLAS DALLAS RN100788959 CN602717464 10/21/2014 ,RSUNIGA	2600 BUILD MATE Singleton CORPORTION Blvd OF AMERICA
3 7711A CONSTRUCT 124014 R	BUILDING MATERIALS CORPORATION OF AMERICA	03/2006 02/13/2007 ABERKSAN	ISSUED COMPLETE	ASPHALT 02/13/2007 ROOFING SHINGLE MANUFACTURING	DALLAS DALLAS RN100788959 CN602717464 10/21/2014 ,ACOX	2600 BUILDING MATERIALS Singleton CORPORATION Blvd OF AMERICA
4 7711A CONSTRUCT 122055 AI	BUILDING MATERIALS CORPORATION OF AMERICA	07/2006 02/13/2007 ABERKSAN	ISSUED COMPLETE	ASPHALT ROOFING 02/13/2007 MATERIALS MANUFACTURING FACILITY	DALLAS DALLAS RN100788959 CN602717464 10/21/2014 ,JBOWERS	2600 BUILDING MATERIALS Singleton Blvd OF AMERICA
5 7711A CONSTRUCT 90713 PI	GAF UBMTG MATERIALS 11/1 CORPORATION	13/2000 JREDDOCH	I NO_STATUS WITHDRAW	N 10/11/2002 PUBLIC MEETING	DALLAS DALLAS RN100788959 CN600474753 12/04/2000 ,LBARTLEY	2600 GAF Singleton MATERIALS Blvd CORPORATION
6 7711A CONSTRUCT 90712 PI	GAF UBHRNG MATERIALS 11/1 CORPORATION	13/2000 JREDDOCH	I NO_STATUS WITHDRAW	N 10/11/2002 CONTESTED CASE HEARING	DALLAS DALLAS RN100788959 CN600474753 12/04/2000 ,LBARTLEY	2600 GAF Singleton MATERIALS Blvd CORPORATION
7 7711A CONSTOPPMT 83987 AI	GAF MEND MATERIALS 07/3 CORPORATION	31/2001 10/21/2004 ,JREDDOCI	HISSUED COMPLETE	ASPHALT ROOFING 10/21/2004 MATERIALS MANUFACTURING FACILITY	DALLAS DALLAS RN100788959 CN600474753 10/21/2014 DNELON	2600 GAF Singleton MATERIALS Blvd CORPORATION
8 7711A CONSTRUCT 75805 RI	GAF ENEWAL MATERIALS 09/2 CORPORATION	28/2000 10/21/2004 JREDDOCH	I ISSUED COMPLETE	ASPHALT AND ROOFING 10/21/2004 MATERIALS MANUFACTURING FACILI	DALLAS DALLAS RN100788959 CN600474753 10/21/2014	2600 GAF Singleton MATERIALS Blvd CORPORATION
9 7711A CONSTRUCT 11089 O	GAF BUILDING WNCHANGE MATERIALS 07/0 CORP	07/1986 08/06/1986 LMALARCH	ISSUED COMPLETE	08/06/1986 ASPHALT ROOFING MFG.	DALLAS DALLAS RN100788959 CN601108897 12/04/2000	2600' GAF Singleton MATER S Blvd CORP

Building Materials of America VOC emissions

<u>before</u>	<u>after</u>
0.01	0.01
0.17	0.17
0.01	0.01
0.02	0.02
0.92	0.92
0.37	0.37
25.23	25.23
0.51	0.51
0.05	0.05
0.05	0.05
9.73	7.23
0.1	0.1
0.04	0.04
1.88	1.88
14.8	12.09
0.14	0.14
54.03	48.82

A: -5.21

Alex Berksan - Re: Building Materials

From:

Christine Chambers < CChambers @trinityconsultants.com>

To:

"Alex Berksan" <ABERKSAN@tceq.state.tx.us>

Date:

Friday, January 09, 2009 6:40 PM

Subject:

Re: Building Materials

CC:

"Harris, Doug" <dharris@gaf.com>

Attachments: maert new.doc

Alex.

The revised MAERT has been reviewed and approved by GAF.

Thank you, Christine

Christine M. Otto Chambers **Managing Consultant Trinity Consultants** (972) 661-8100 Phone (972) 385-9203 Fax cchambers@trinityconsultants.com

From:

"Alex Berksan" <ABERKSAN@tceq.state.tx.us>

To:

"Christine Chambers" < cchambers@trinityconsultants.com>

Date:

01/08/2009 05:43 PM

Subject:

Building Materials

Hi Christine:

Here is the draft MAERT for permit 7711A. I will be back in the office on Monday.

Thanks, Alex

Alex Berksan, PE Texas Commission on Environmental Quality Air Permits Division **Mechanical Construction Team** Voice: 512.239.1595

Fax: 512.239.6626

http://www.tceq.state.tx.us/nav/permits/air_permits.html



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Permit Number 7711A

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
STILLYARD OPERA	TION			
HTR3	T-1 Laminating Adhesive Bulk Storage Tank Heater Vent	NO _x SO ₂ PM ₁₀ CO VOC	0.05 0.01 0.01 0.04 0.01	0.22 0.01 0.02 0.18 0.01
CECO1	T-1 and T-2 Laminating Adhesive Tanks CECO Filter Vent	VOC PM ₁₀	0.03 0.01	0.17 0.02
HTR4	T-2 Laminating Adhesive Bulk Storage Tank Heater Vent	NO _x SO ₂ PM ₁₀ CO VOC	0.05 0.01 0.01 0.04 0.01	0.22 0.01 0.02 0.18 0.01
HTR 5	Asphalt Heater for T-14 and T-15 Coating Asphalt Storage Tank a Coating Asphalt Loop Feed Tan	and SO ₂	0.10 0.01 0.01 0.08 0.01	0.43 0.01 0.03 0.36 0.02
BLR5	Standby Boiler Vent	NO _x SO ₂ PM ₁₀ CO VOC	3.73 0.02 0.28 3.13 0.21	16.34 0.09 1.23 13.71 0.92

8	Boiler and Thermal Oxidizer Vent Controlling Tanks T-8, T-9, T-10, T-14, T-15, T-110, T-120, and Blowstills T-13 and T-26	NO _x SO ₂ PM ₁₀ CO VOC	0.72 0.73 5.00 1.26 0.09	3.16 3.18 21.90 5.53 0.37
COMMON TO LINE	1 AND LINE 3			
34	Electrostatic Precipitator (for Line 1 and 3) Stack	VOC PM ₁₀	5.76 3.43	25.23 15.02
98	Rail 2 Stack	PM ₁₀ VOC	4.63 0.51	4.59 0.51
LINE NO. 1 OPERA	TION			
1-1	Line 1 Stabilizer Storage and Heater Baghouse Stack	PM ₁₀	0.23	1.01
1-3	Line 1 Stabilizer Use Bin Baghouse Stack	PM ₁₀	0.03	0.13
1-4 -4	Line 1 (Surfacing Section) Dust Collector Stack No. 1	PM ₁₀	0.59	2.58
1-5	Line 1 (Surfacing Section) Dust Collector Stack No. 2	PM ₁₀	0.59	2.58
1-6	Line 1 (Surfacing Section) Dust Collector Stack No. 3	PM ₁₀	0.59	2.58
HTR1	Line 1 Stabilizer Thermal Fluid Heater Vent	NO _x SO ₂ PM ₁₀ CO VOC	0.20 0.01 0.02 0.17 0.01	0.86 0.01 0.07 0.72 0.05
HTR2	Line 1 Thermal Fluid Heater Vent	NO _x SO ₂ PM ₁₀ CO VOC	0.01 0.20 0.01 0.02 0.17 0.01	0.05 0.86 0.01 0.07 0.72 0.05

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
COOL1(total 3 stks)	Line No. 1 Cooling Section Exhaust	VOC PM ₁₀	1.65 4.00	7.23 17.52
LINE 3 OPERATION				
25	Sand Application Baghouse Stack	C PM ₁₀	3.86	16.91
26A	Stabilizer Storage Baghouse Stad	ck PM ₁₀	0.15	0.70
26B	Stabilizer Storage Baghouse Stad	ck PM ₁₀	0.29	1.26
27	Stabilizer Heater Baghouse Stack	K PM ₁₀	0.09	0.40
28	Asphalt Heater Vent	NO _x SO ₂ PM ₁₀ CO VOC	0.59 <0.01 0.04 0.50 0.03	2.60 0.02 0.20 2.20 0.10
30	Hot Oil Heater Vent (Thermal Fluid Heater)	NO _x SO ₂ PM ₁₀ CO VOC	0.27 <0.01 0.02 0.23 0.01	1.20 0.01 0.10 1.00 0.04
FUG1	Plantwide Fugitive Emissions (4)	VOC PM ₁₀	0.43 0.91	1.88 3.97
COOL3 (total 3 stks) HTR6	Line 3 Cooling Section (3 Exhaus Fumes from Asphalt Coater Line 3 Stabilizer Thermal Fluid Heater Vent	VOC PM ₁₀ NO _x SO ₂ PM ₁₀ CO VOC	2.76 6.00 0.60 <0.01 0.05 0.49 0.03	12.09 26.30 2.58 0.02 0.20 2.16 0.14

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr TPY**

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) NO_x total oxides of nitrogen
 - SO₂ sulfur dioxide
 - PM₁₀ particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 - CO carbon monoxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Fugitive emissions are an estimate only.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:
 - <u>24</u> Hrs/day <u>7</u> Days/week <u>52</u> Weeks/year or <u>8,760</u> Hrs/year
- ** Compliance with annual emission limits is based on a rolling 12-month period.

Maximum allowable Asphalt Throughput Rate: Line 1 at 24,886 lbs/hour Line 3 at 41,472 lbs/hour

Maximum Allowable Production Rate (Line 1 plus Line 3): 171 tons/hour of finished shingles 1,498,000 tons/year of finished shingles

Dated **DRAFT**

ALL DOCUMENTS BEHIND THIS PAGE ARE FOR YEAR 2007

Kathleen Hartnett White, Chairman Larry R. Soward, Commissioner Glenn Shankle, Executive Director





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 13, 2007

Mr. David Kirkham Regional Operations Director Building Materials Corporation of America P.O. Box 655607 Dallas, Texas 75265-5607

RECEIVED

SEP 2 1 2007

Re: Permit Amendment

Permit Number: 7711A

Asphalt and Roofing Materials Manufacturing Facility

Dallas, Dallas County

Regulated Entity Number: RN100788959 Customer Reference Number: CN602717464

Account Number: DB-0378-S

TCEQ CENTRAL FILE ROOM

Dear Mr. Kirkham:

This is in response to a letter received on April 7, 2006, from Trinity Consultants in your behalf and your Form PI-1 (General Application for Air Preconstruction Permits and Amendments) concerning the proposed amendment to Permit Number 7711A. We understand that you propose to revise the maximum allowable emission rates table (MAERT) of your permit based on recent testing performed at your facility.

As indicated in Title 30 Texas Administrative Code § 116.116(b) [30 TAC § 116.116(b)], and based on our review, Permit Number 7711A is hereby amended. This information will be incorporated into the existing permit file. Enclosed is a MAERT to replace that currently attached to your permit. We appreciate your careful review of the MAERT of the permit and assuring that all requirements are consistently met.

This amendment will be automatically void upon the occurrence of any of the following, as indicated in 30 TAC § 116.120(a):

- 1. Failure to begin construction of the changes authorized by this amendment within 18 months from the date of this authorization.
- 2. Discontinuance of construction of the changes authorized by this amendment for a period of 18 consecutive months or more.
- 3. Failure to complete the changes authorized by this amendment within a reasonable time.

Mr. David Kirkham Page 2 February 13, 2007

Re: Permit Number 7711A

Upon request, the Texas Commission on Environmental Quality (TCEQ) Executive Director may grant extensions as allowed in 30 TAC § 116.120(b).

You may file a motion to overturn with the Chief Clerk. A motion to overturn is a request for the commission to review the TCEQ Executive Director's approval of the application. Any motion must explain why the commission should review the TCEQ Executive Director's action.

A motion to overturn must be received by the chief clerk within 23 days after the date of this letter. An original and 11 copies of a motion must be filed with the chief clerk in person or by mail. The Chief Clerk's mailing address is Office of the Chief Clerk (MC-105), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. On the same day the motion is transmitted to the chief clerk, please provide copies to Mr. Robert Martinez, Director, Environmental Law Division (MC-173), and Mr. Blas J. Coy, Jr., Public Interest Counsel (MC-103), both at the same TCEQ address above. If a motion is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

Thank you for your cooperation and interest in air pollution control. If you need further information or have any questions, please contact Mr. Alex Berksan, P.E., at (512) 239-1595 or write to the Texas Commission on Environmental Quality, Office of Permitting, Remediation, and Registration, Air Permits Division (MC-163), P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,

Richard A. Hyde, P.E., Director

Air Permits Division

Office of Permitting, Remediation, and Registration

Texas Commission on Environmental Quality

RAH/AB/def

Enclosure

cc: Ms. Christine Otto, Managing Consultant, Trinity Consultants, Dallas Mr. David Miller, Section Manager, Air Pollution Control Program, City of Dallas Environmental and Health Services, Dallas Air Section Manager, Region 4 - Fort Worth

Project Number: 122055

Permit Number 7711A

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
STILLYARD OPERA	ATION			
HTR3	T-1 Laminating Adhesive Bulk	NO_x	0.05	0.22
	Storage Tank Heater Vent	SO_2	0.01	0.01
	- -	PM_{10}	0.01	0.02
		CO	0.04	0.18
		VOC	0.01	0.01
CECO1	T-1 and T-2 Laminating Adhesive	VOC	0.03	0.17
	Tanks CECO Filter Vent	PM_{10}	0.01	0.02
HTR4	T-2 Laminating Adhesive Bulk	NO_x	0.05	0.22
	Storage Tank Heater Vent	SO_2	0.01	0.01
		PM_{10}	0.01	0.02
	•	CO	0.04	0.18
		VOC	0.01	0.01
HTR 5	Asphalt Heater for T-14 and T-15	NO _x	0.10	0.43
	Coating Asphalt Storage Tank and	~	0.01	0.01
	Coating Asphalt Loop Feed Tank	PM_{10}^2	0.01	0.03
		CO	0.08	0.36
		VOC	0.01	0.02
BLR5	Standby Boiler Vent	NO,	3.73	16.34
	· , —	$SO_2^{}$	0.02	0.09
		PM_{10}	0.28	1.23
		CO	3.13	13.71
		VOC	0.21	0.92

Emission	Source	Air Contaminant	Emission 1	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
8	Boiler and Thermal Oxidizer Vent Controlling Tanks T-8, T-9, T-10, T-14, T-15, T-110, T-120, and Blowstills T-13 and T-26	NO_x SO_2 PM_{10} CO VOC	0.72 0.73 5.00 1.26 0.09	3.16 3.18 21.90 5.53 0.37
COMMON TO LINI	E 1 AND LINE 3			
34	Electrostatic Precipitator (for Line 1 and 3) Stack	VOC PM ₁₀	5.76 3.43	25.23 15.02
98	Rail 2 Stack	PM ₁₀ VOC	4.63 0.51	4.59 0.51
LINE NO. 1 OPERA	TION			
1-1	Line 1 Stabilizer Storage and Heater Baghouse Stack	PM_{10}	0.23	1.01
1-3	Line 1 Stabilizer Use Bin Baghouse Stack	PM_{10}	0.03	0.13
1-4	Line 1 (Surfacing Section) Dust Collector Stack No. 1	PM_{10}	0.59	2.58
1-5	Line 1 (Surfacing Section) Dust Collector Stack No. 2	PM_{10}	0.59	2.58
1-6	Line 1 (Surfacing Section) Dust Collector Stack No. 3	PM_{10}	0.59	2.58
HTR1	Line 1 Stabilizer Thermal Fluid Heater Vent	NO _x SO ₂ PM ₁₀ CO VOC	0.20 0.01 0.02 0.17 0.01	0.86 0.01 0.07 0.72 0.05

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
HTR6	Line 3 Stabilizer Thermal Fluid	NO _x	0.60	2.58
	Heater Vent	SO ₂ PM ₁₀	<0.01 0.05	0.02 0.20
		CO VOC	0.49 0.03	2.16 0.14

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) NO_x total oxides of nitrogen
 - SO₂ sulfur dioxide
 - PM₁₀ particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 - CO carbon monoxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Fugitive emissions are an estimate only.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:
 - 24 Hrs/day 7 Days/week 52 Weeks/year or 8.760 Hrs/year
- ** Compliance with annual emission limits is based on a rolling 12-month period.

Maximum allowable Asphalt Throughput Rate: Line 1 at 24,886 lbs/hour Line 3 at 41,472 lbs/hour

Maximum Allowable Production Rate (Line 1 plus Line 3): 171 tons/hour of finished shingles 1,498,000 tons/year of finished shingles

Construction Permit Amendment Review Analysis & Technical Review

Company: City: County:	Building Materials Corporation Of Ame Dallas Dallas	erica Permit No.: Record No.: Account No.:	7711A 122055, 124014 DB-0378-S
Project Type:	CAMD, CRVN	Regulated Entity No.:	RN100788959
Project Review		Customer Reference No.:	CN602717464
Facility Name:	Asphalt Roofing Materials Manufacturi	ng Facility	
Is a state or loca Is waste or tire of Are waste mana Will action on the Have any change	Checklist cy/precedent be established? (ED signature required if yell official opposed to the permit? (ED signature required derived fuel involved? (ED signature required if yes) agement facilities involved? (ED signature required if yes) is application be posted on the Executive Director's ages to the application or subsequent proposals been required and the environment during the review?	s)enda?ird to increase protection	
MAERT with a was received to	ew als Corporation of America (formerly GAF Materials Co VOC emission rate obtained from testing on EPN 34 (E revise the emissions of a boiler (EPN 8), which was reper and comment period.	Electrostatic Precipitator Stack). A subs	sequent alteration request
Was the applicate If yes, what Is the permit rec	with 30 TAC Chapter 60, a compliance history report watton received after September 1, 2002?	ny rating? 0.3 average he basis	Yes
01 00111p111111	oo moory or running.		
Public Notice In			
§39.403 Public i	notification required?	ministrative Complete	Yes
В.	Small Business source?		4/25/2000
§39.418 C.	Date 1st Public Notice /Admin Complete/Legislators	letters mailed:	4/25/2006, 5/5/2006
	Pollutants: organic compounds	_	
E.	Date Published: 5/23/2006 in The Dallas Morning N		
म	Date Affidavits/Copies received: 6/1/2006, 7/31/2006 Bilingual notice required? Yes)	
1.	Language: Spanish		•
	Date Published: 5/23/2006 in Al Día		
	Date Affidavits/Copies received: 6/1/2006, 7/31/200		
	Certification of Sign Posting / Application availability	y Recd 6/1/2006	
	Public Comments Received? No d Public Notification required? No	•	
*	no, give reason: No hearing request received during f	irst notice.	
Emission Contr			
§116.111(a)(2)(0 §116.140		in the application?	
3110.110	1 offine 1 co. 4700		NU30130
Sampling and T			
§116.111(a)(2)(A	A)(I) Are the emissions expected to comply with all TO	CEQ air quality rules and regulations, ar	nd the intent of the Texas

Review Analysis & Technical Review

Permit No. 7711 Page 2	A		Regulated Entity No. RN100788959
§116.111(a)(2)(1	•	pe measured?	Yes
Federal Progra	m Applicability		
§116.111(a)(2)(1	O) Compliance		pected? Yes rocessing and Asphalt Roofing Manufacture
§116.111(a)(2)(1			expected?
§116.111(a)(2)(1			xpected?
§116.111(a)(2)(1			No
•	A. Is the s	ite located in a nonattainm	ent area? Yes (ozone-moderate)
	B. Is the s	ite a federal major source i	for a nonattainment pollutant?
			ce for a nonattainment pollutant by itself?
	D. Is the p	roject a federal major mod	lification for a nonattainment pollutant? No
116.111(a)(2)(I)		licable?	No
	A. Is the s	ite a federal major source ((100/250 tons/yr)?
			ce by itself? No
	C. Is the p	roject a federal major mod	lification?
Mass Con and S	Trade Applicability		
§116.111(a)(2)(1		l Trada annliachla?	No
9110.111(a)(2)(1			es, or account obtain allowances to operate?
	Did the propose	d facility, group of facilities	s, or account obtain anowances to operate?
Title V Applica	hility	•	
		urce under FCAA Section	112(b)?
3			e of any single HAP?
			e of a combination
§122.10(13)(C)	` ,		pollutant?
			Yes
		-	
Request for Cor	The state of the s		
Region:	4 DFW	Reviewed by:	Deferred to City of Dallas
City:	Dallas	Reviewed by:	Amanda Trammel 1/22/2007

Process Description

The plant manufactures asphalt shingles for the roofing industry. A dry, nonwoven fiberglass mat is fed into the roofing machine from an unwind stand. The fiberglass is carried through the coating section, where coating asphalt mixed with a stabilizer (limestone) is applied to both surfaces of the mat. The coating operation is followed by the surfacing section. Ceramic colored granules are blended and dropped in proper sequence onto the coated web and embedded. The back surface of the sheet is sprinkled with sand to prevent it from adhering to rolls and itself in the finished package. The hot sheet, with a mineralized surface, then goes into the cooling section of the machine. Cooling is accomplished by passing the web over a series of water-cooled drums, through water mist sprays and between air jets. It is then accumulated in the looper section of the machine to provide surge capacity required prior to cutting. Self-seal striping dots are then applied and the sheet is cut into shingles and automatically packaged.

The boiler in question accepts the thermal oxidizer exhaust for preheating recovery and fires as necessary to meet the steam needs of the plant.

Sources, Controls, Source Reduction and BACT [§116.111(a)(2)(C)]

VOC emissions listed for EPN 34, Electrostatic Precipitator Stack, were found to be 5.76 lb/hr, instead of the permitted 3.20 lb/hr. This ESP controls emissions from the coating portion of the process. The annual emissions were revised to 25.23 tons/yr from the permitted 14.94 tons/yr.

Review Analysis & Technical Review

Permit No. 7711A Page 3

Regulated Entity No. RN100788959

The waste heat boiler (EPN 8) was replaced under PBR 106.264 and the revised emissions are included in this amended permit. The change in emissions from EPN 8 is as follows (tons/yr):

	\underline{NO}_{x}	\underline{SO}_2	\underline{PM}_{10}	<u>CO</u>	<u>VOC</u>
Before	7.70	3.20	21.90	5.60	0.40
After	3.16	3.18	21.90	5.53	0.37
Δ	-4.54	-0.02	0	-0.07	-0.03

Use of the ESP to control emissions from the coating operations is consistent with current BACT. The boiler does not have any controls

Impact	s Evaluation
1.	Was modeling done? Yes Type? Screen
2.	Will GLC of any air contaminant cause violation of NAAQS?
3.	Is this a sensitive location with respect to nuisance? Yes (David Morris, City of Dallas EHS site review)
4.	Is the site within 3000 feet of any school?
5.	Toxics Evaluation:
Applica	licant's technical consultant (Christine Otto, Trinity Consultants, Dallas) followed the flowchart in the Modeling and Effects Review ibility guidance document. Since the concentration due to the emission increase was <0.1xESL, no further modeling or effects was required.
Miscell	aneous
Miscell	Is applicant in agreement with special conditions? Yes
_	Is applicant in agreement with special conditions? Yes
_	Is applicant in agreement with special conditions? Yes Company representative? Christine Otto, phone 2/6/2007
1.	Is applicant in agreement with special conditions? Yes
1. 2.	Is applicant in agreement with special conditions? Company representative? Christine Otto, phone 2/6/2007 Emission reductions from source reduction or pollution prevention None Emissions reductions resulting from the application of BACT required by state rules, avoidance of potential impacts problems,

Project Reviewer

Date

Team Leader/Section Manager/Backup